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TO	NAME AND ADDRESS	DATE	INITIALS
1	Ch/SRB	2-13	RJS
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Feb 12 '76

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REAR PROJECTION

SCREENS

Uni-Screen Tech. 51

51
JGD

FOR THE BEST PROJECTED IMAGE USE THE DIRECT VIEWING METHOD WITH UNI-SCREEN TRANSLUCENT SCREEN MATERIALS.

NOW TAKE ADVANTAGE OF THE LATEST DEVELOPMENTS IN SCREEN VIEWING AND ACHIEVE THE ULTIMATE IN PROJECTED PRESENTATIONS UNDER VIRTUALLY ALL CONDITIONS, EVEN DAYLIGHT.

A COMPLETE CHOICE OF MATERIALS . . . GLASS, PLEXIGLAS, RIGID AND FLEXIBLE PLASTICS.

ACHIEVE HIGHER CONTRAST, GREATER DEPTH OF COLOR AND SHARPER PICTURE DETAIL.

The new Uni-Screen Series 500 rear projection screens give you the finest projected image. Based upon an advanced optical concept, Uni-Screen is actually an arrangement of microscopically tiny cells or lenses which are extremely transparent and capable of spreading or diverging transmitted light rays. This tough but thin coating of Uni-Screen material is fused onto one surface of a variety of transparent base materials. Glass, Plexiglas and various plastics in a variety of thicknesses are used.

When the projected image from the projection system is focused upon the rear surface of Uni-Screen from behind the screen actually is optically coupled to the optical system of the projector. The screen becomes the final element in the optical system. It is not a reflected image as in front, or conventional, projection. The image is projected **THROUGH** the screen. In effect, the audience is looking into the projector lens, magnified by the distance from the screen and diffused by the screen itself. Thus, the term "direct viewing."

YOUR PROJECTOR CANNOT PROJECT THE DARK OR BLACK SHADOW AREAS OF AN IMAGE!

Dark tone colors and shadows are only as good as the SCREEN allows. Uni-Screen is highly color sensitive and actually compensates for the dark areas of an image and brings out full deep color and contrast. A reasonable comparison between a reflected image and a direct view (rear-screen) image would be the difference between a glossy photo and a painting.

Consider the value of this superior method of projecting images for your present or future installations. In a recent report 78% of major companies surveyed stated that they were using rear projection in the presentation of slide materials. Many reported wide use of rear projection in the projection of motion pictures and film strips.

UNIVERSAL SCREEN COMPANY

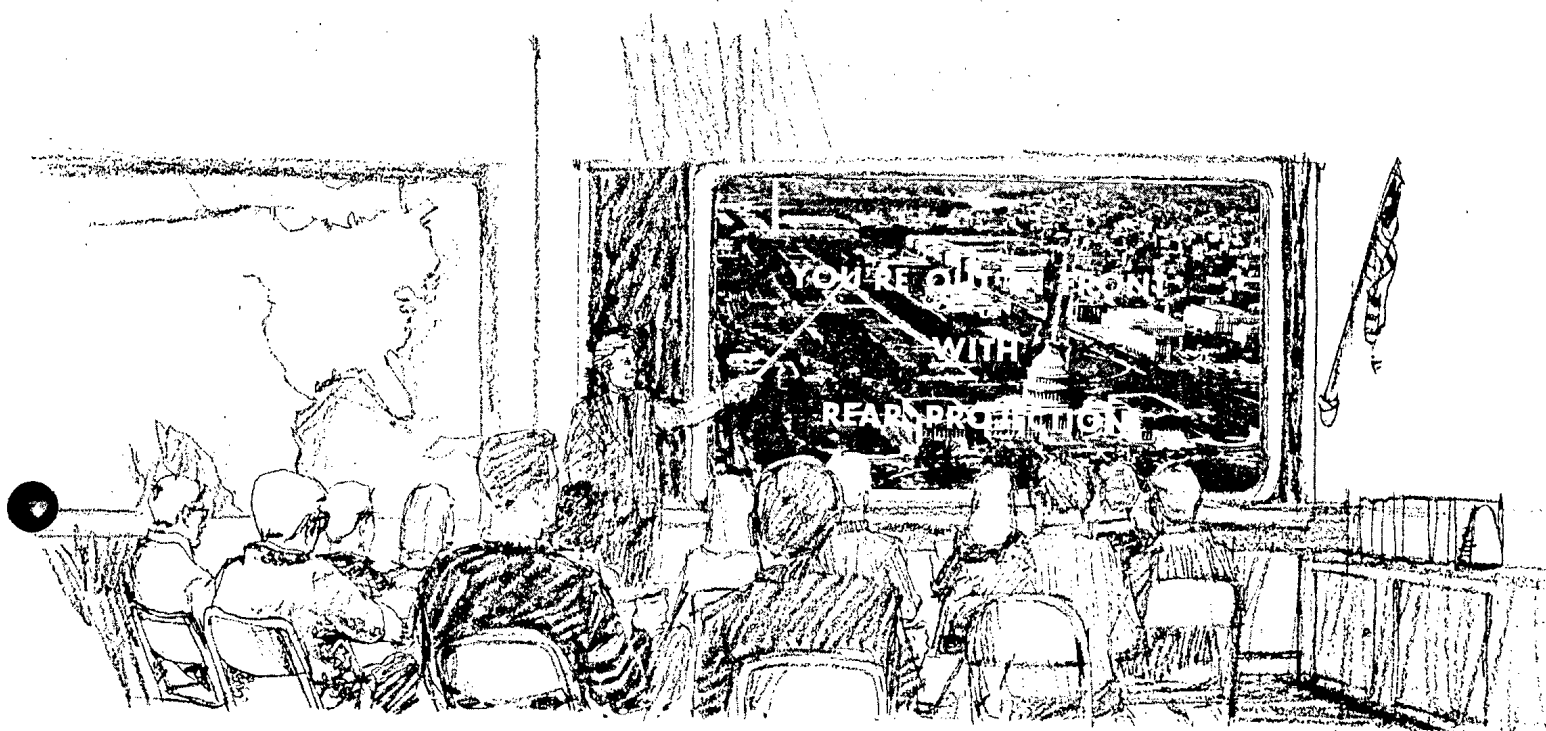
7251 N. Varna Avenue
North Hollywood, California 91605



REAR PROJECTION

SCREENS

Series 500 Uni-Screen



It's new! It's sweeping the country! The finest projection systems are now utilizing rear projection. You can get out in front with your own rear projection installation. Your projected images will come to life with the use of Uni-Screen 500 series rigid rear projection screens.

ADVANTAGES IN REAR PROJECTION

Widely used in classrooms, conference rooms, displays, advertising units, computers, television and a host of other applications, rear projection provides distinct advantages over conventional projection systems.

Uni-Screen 500 will give you the best in rear projection screens. More than a screen, the 500 is a delicate arrangement of tiny lenses applied to a rigid glass or plastic base. It is an optical achievement that now makes available the ultimate in projected images under virtual daylight conditions.

CUSTOM INSTALLATIONS

Factory engineering and technical advice is available on request. This screen material is also available by the foot for quantity users.

Available in a full range of sizes complete with mounting brackets, screws and installation instructions.

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**REAR PROJECTION****SCREENS**

Series 500 Uni-Screen

PRICE LIST: Uni-Screen 500

PLEXIGLAS			GLASS		
SIZE	THICKNESS	PRICE	SIZE	THICKNESS	PRICE
9"x12"	1/16"	\$ 8.50	9"x12"	1/8"	\$ 8.5
12"x12"	1/16"	\$ 10.75	12"x12"	1/8"	\$ 10.7
12"x24"	1/16"	\$ 21.00	12"x24"	1/8"	\$ 21.0
18"x24"	1/16"	\$ 31.00	18"x24"	1/8"	\$ 31.0
24"x24"	1/16"	\$ 41.00	24"x24"	1/8"	\$ 41.0
24"x36"	1/16"	\$ 61.00	24"x36"	1/8"	\$ 61.0
36"x36"	1/16"	\$ 91.00	36"x36"	1/8"	\$ 91.0
36"x48"	1/8"	\$133.00	36"x48"	3/16"	\$133.0
36"x60"	1/8"	\$166.00	36"x60"	3/16"	\$166.0
48"x48"	1/8"	\$177.00	48"x48"	3/16"	\$177.0
48"x60"	1/8"	\$221.00	48"x60"	3/16"	\$221.0
48"x72"	1/8"	\$264.00	48"x72"	3/16"	\$264.0
60"x60"	1/4"	\$300.00	60"x60"	1/4"	\$300.0
60"x84"	1/4"	\$420.00	60"x84"	1/4"	\$420.0
60"x96"	1/4"	\$480.00	60"x96"	1/4"	\$480.0
			60"x108"	1/4"	\$540.0

NOW AVAILABLE FOR CUSTOM INSTALLATION

Uni-Screen 500 screen materials are available cut to any size or shape within the maximum limits shown. An extra charge is made for circle or irregular shapes. Edges are square cut and dressed for smoothness. Tolerances are kept within plus and minus 1/16".

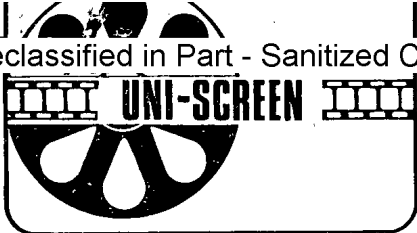
Uni-Screen 500 PLEXIGLAS

TRANSMISSION	THICKNESS	SIZES	PRICE PER SQ. FT.
72%	1/8"	To 36"x48"	\$ 9.00
72%	3/16"	To 50"x72"	\$10.00
72%	1/4"	To 90"x120"	\$11.00
72%	3/8"	To 90"x120"	\$16.00
72%	1/2"	To 90"x120"	\$20.00

Uni-Screen 500 GLASS

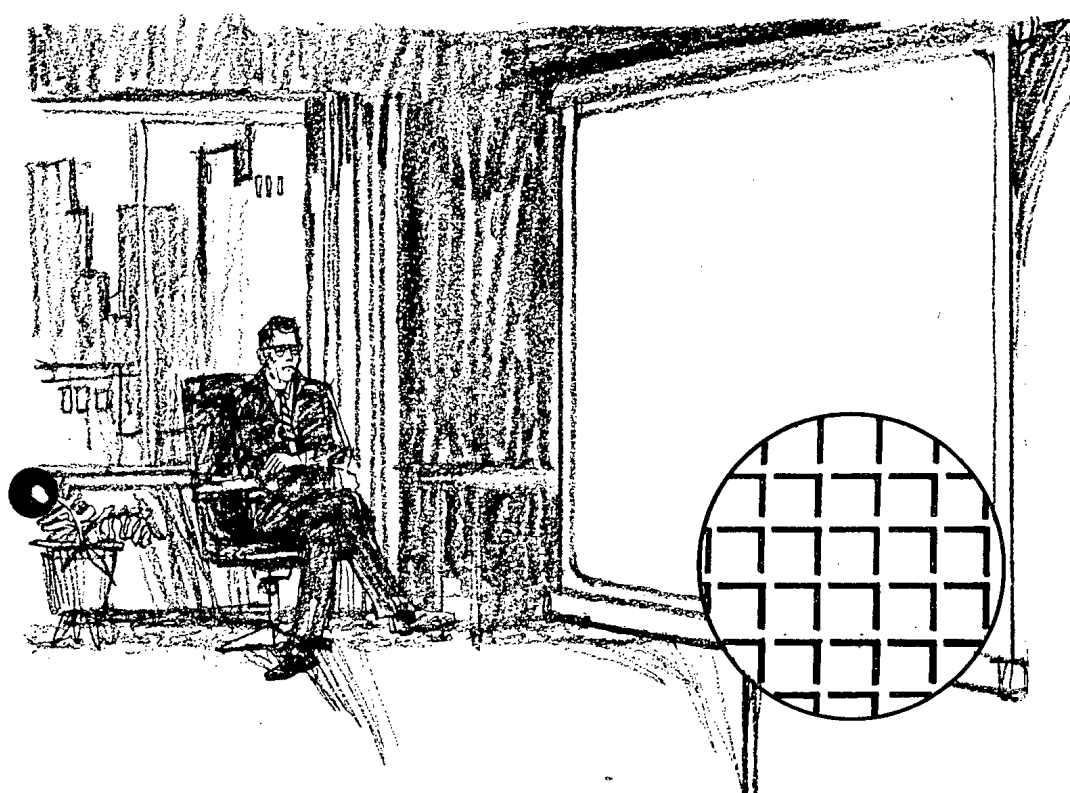
TRANSMISSION	THICKNESS	SIZES	PRICE PER SQ. FT.
72%	1/16"	To 48"x72"	\$ 9.00
72%	1/8"	To 67"x102"	\$10.00
72%	1/4"	To 67"x102"	\$12.00
72%	3/8"	To 60"x96"	\$15.00
72%	1/2"	To 60"x96"	\$16.50

For additional technical data and information on construction and use of Uni-Screen 500 rear projection screens refer to our specification sheet titled "Rear Projection — Its Uses and Applications."



NEW
LENTICULAR SURFACE

Series 275 Uni-Screen



This screen combines the finest high gain screen material with a scientifically designed and optically corrected LENTICULAR screen surface, making available in large sizes the same brilliant image formerly available only in small classroom sizes.

NOW GET THE BIG PICTURE!

For a brilliant image and a wide, wide viewing angle, select the Uni-Screen 275 for your lecture hall, social hall or auditorium. Now your audience can have the advantage of a high gain screen, but with the same qualities of a matte or beaded screen. The picture is the same all over the hall. Your viewers at the side have the same sharp detail and definition as those in the center.

Utilizing a simple and easy to operate rope and pulley device, this screen can be installed in the largest hall in minutes and will give you years of trouble free service.

Available in limited sizes up to 10ft. x 20ft. Comes complete with installation instructions and all mounting hardware. Specify wall or ceiling installation.

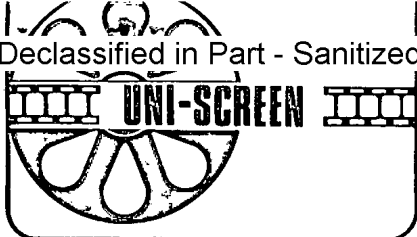
Uni-Screen Series 275

Price List

Size	Ship Wt.	Price
8'x10'	95#	\$176.00
10'x10'	97#	\$187.00
9'x12'	100#	\$198.00
12'x12'	105#	\$220.00
10 1/2'x14'	120#	\$230.00
6'x16'	140#	\$225.00
12'x16'	147#	\$290.00
9'x18'	155#	\$270.00
8'x20'	165#	\$275.00
10'x20'	172#	\$310.00

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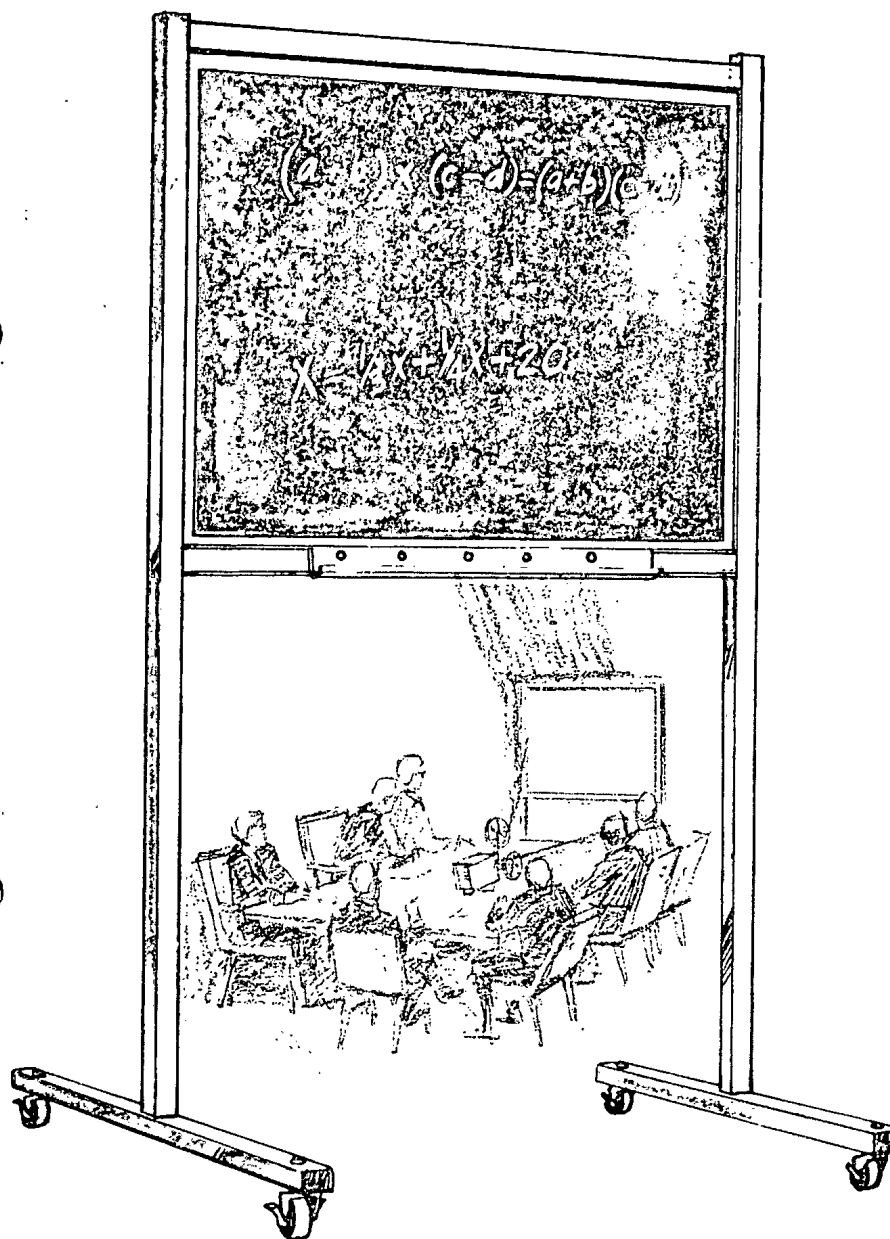


PROJECTION SCREEN

AND CHALKBOARD

Uni-Screen DUO BOARD

NOW YOU SEE THE PICTURE, NOW YOU DRAW IT!



Need a handy portable projection screen? Could you also use a neat chalkboard? The new Uni-Screen Duo Board is your answer. One side is a magnetic chalkboard, turn it around and you have a convenient projection screen. Turns easily on smooth roll locking casters. Uni-Screen's high gain lenticular screen surface permits projection under normal room light conditions.

The green magnetic surface chalkboard is of the highest quality. The sturdy frame, stand and base are of 1 1/4" square tubular steel.

SIZE: 36" x 48"

PRICE: \$87.00

UNIVERSAL SCREEN COMPANY

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PROJECTION SCREEN

Uni-Screen Tech. 52

SIMPLE "RULES OF THUMB" FOR SELECTING THE PROPER TYPE AND SIZE OF PROJECTION SCREEN

TYPE OF SCREEN TO BE SELECTED

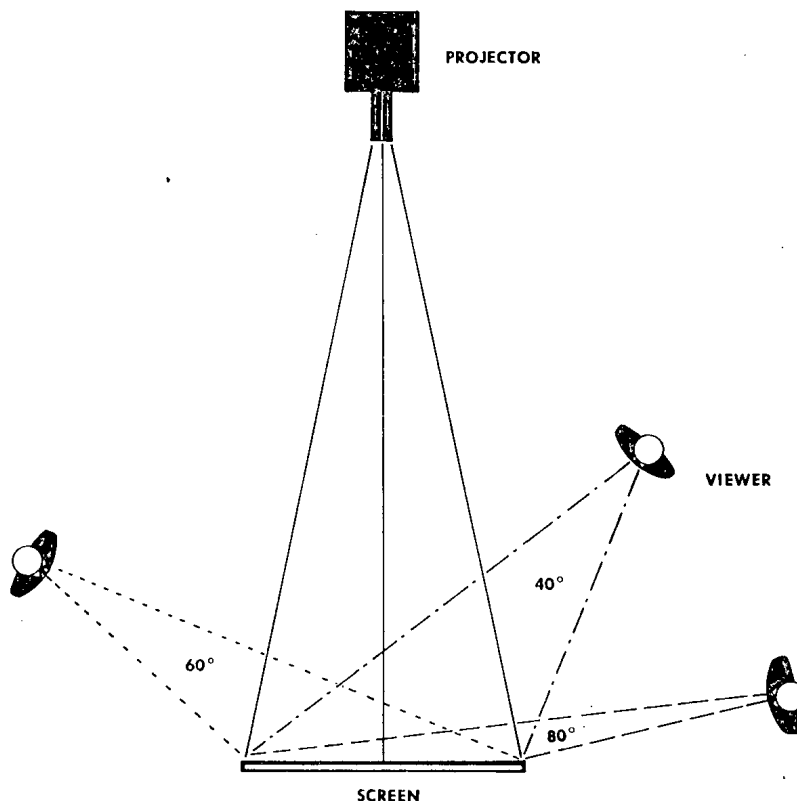
Wherever possible it is recommended that rear-screen projection be used. There are many distinct advantages in the use of rear projection which are discussed more fully in Uni-Screen Technical Sheet 51. These advantages should be considered in the selection of any screen installation.

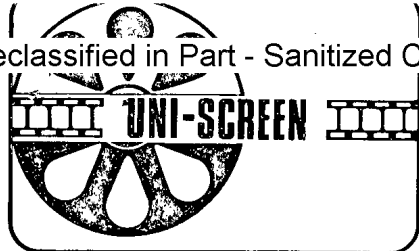
SCREEN SURFACES FOR FRONT PROJECTION

For most general projection systems where front projection is used, the matte white screen surface is adequate. This surface produces an exceptionally bright image both in color and black and white. With matte white the room light needs to be dimmed or darkened for best results.

For projecting images in rooms where ambient light is high select Uni-Screen high gain surface either standard or lenticular. The standard high gain surface is for use in rooms where the viewing angle is not more than 40 degrees. Select Uni-Screen's lenticular surface where extremely wide angle viewing is required (up to 80 degrees) and where high ambient light is required.

The diagram below shows the relative viewing angle of each screen. Generally, with a matte white screen the maximum spread of the audience should not exceed 60 degrees. With the standard high gain screen the maximum spread of the audience should not exceed 40 degrees. With the high gain lenticular surface the audience spread should not exceed 80 degrees. For optimum results with any screen a maximum viewing angle of 60 degrees is best.





SCREEN SELECTION FOR REAR PROJECTION

Bear in mind that with front projection the image is reflected from the screen to the audience. In rear projection the image is projected on the rear of the screen and diffused and transmitted THROUGH the screen to the audience.

Whereas a front projection screen acts much as a MIRROR, a rear projection screen functions more as a LENS. The projection screen breaks up the light beams, dispersing them over a large radius, creating an image on the screen that is viewable from various spots within a room.

The relationship between the light source (projector), film, screen and the viewing environment must be considered. Rear projection allows a selective diffusing of light as it is transmitted through the screen.

The result is a very low reflection along with high transmission.

Properly installed rear projection screens will give you the best overall results, particularly in rooms that are well lighted and where that light level needs to be maintained. Your Uni-Screen rear projection screen is more than a screen, it is a fine viewing lens that allows your audience to see the whole picture.

The type of rear projection screen you select will be determined by your needs. In smaller installations such as individual classrooms either glass or Plexiglas Uni-Screen is recommended. For large areas such as auditoriums, large lecture halls or theaters flexible plastic screen material is suggested. It is well to use the more sound-proof rigid materials wherever possible. If your installation calls for a screen larger than those available in the rigid materials then utilize the plastic base.

HOW BIG SHOULD YOUR SCREEN BE?

There could be many answers. One point to consider is that with a lighted room the screen can actually be SMALLER than in a darkened room. The eye performs best when adjusted to normal room light. Another factor to be considered is the type of material to be projected. However, in general you may apply this simple rule of thumb: Allow one foot of screen width for each five feet of viewing distance. If your farthest seat is 60 feet from the screen then allow for 12 feet of screen width (9' x 12'). Or, if your classroom is 30 feet from screen to rear wall then allow for six feet of screen width.

When using properly installed rear-screen projection screens you may safely reduce this formula by 40%.

Again, it is important to consider the type of material to be projected. The above formula covers general types of projected images. Where specific technical material such as charts and diagrams are to be used exclusively then the screen may be reduced or enlarged as the need may be.

For technical advice on any specific installation write or call our factory.

UNIVERSAL SCREEN COMPANY

7251 N. Varna Avenue
North Hollywood, California 91605



REAR PROJECTION SCREEN

Series 525 Uni-Screen

**HIGH DIFFUSION, PIN POINT CLARITY, TRUE COLOR OR
BLACK AND WHITE. IDEAL FOR TECHNICAL APPLICATIONS.**

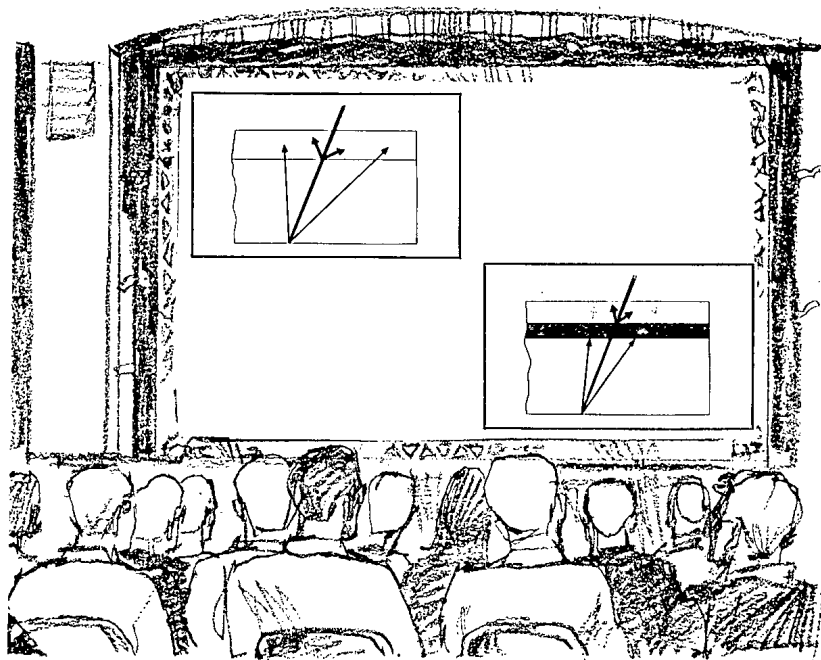
When your rear projection needs call for distinct sharpness of image with a maximum diffusion of light then you need Uni-Screen 525. Here is a translucent rear projection screen that will guarantee you finest results.

This screen material can be installed in the wall, stapled into frames or used in portable rear projection kits. It is flexible and can be rolled up and placed in its sturdy tube for storage.

Available by the foot in dimensions up to 42" x 92" without seams. Comes either taped for stapling or taped and grommeted for installing with lacing.

SIZES: Up to 42" x 92"

PRICE: \$3.50 per sq. ft.



THE TREND IS TO REAR PROJECTION

Have you ever used rear projection for your own slides or movies? If not, you will soon. If you have already tried rear-screen projection of the films, it's a good bet you'll be using it more and more.

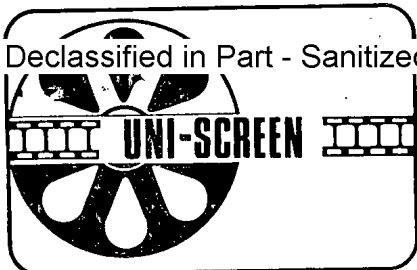
RP, as it is called in the trade, the method of projecting from the back of the screen instead of the front of the screen, is gaining widespread popularity. And, there are many advantages. You eliminate the projector from your audience. No more worries about the beam of light from the projector being broken by someone standing up. You don't have to have a center aisle, thus opening up for viewing the best spot in the room. And, no longer will your audience be tripping over your projector wires and cables.

But, the biggest advantage is on the plus side. With rear projection you can maintain a high level of room light . . . no pulling of shades or dousing of lights.

For further information and technical data for your rear-screen projection system write us today.

UNIVERSAL SCREEN COMPANY

7251 N. Varna Avenue
North Hollywood, California 91605



PROJECTION

Series 550 Uni-Screen

FROM THE MOVIE LOTS OF HOLLYWOOD

Large translucent rear projection screens have long been used in the making of motion pictures. These "background" screens are now available to schools, churches, drama groups, photographers and many others.

Uni-Screen's 550 series is made of a transparent plastic base. Applied to this base is the unique finishing process that achieves a superior image, brilliant and with a high resolution giving sharp definition. The finishing process employs tiny lens cells to split and diffuse the projected light.

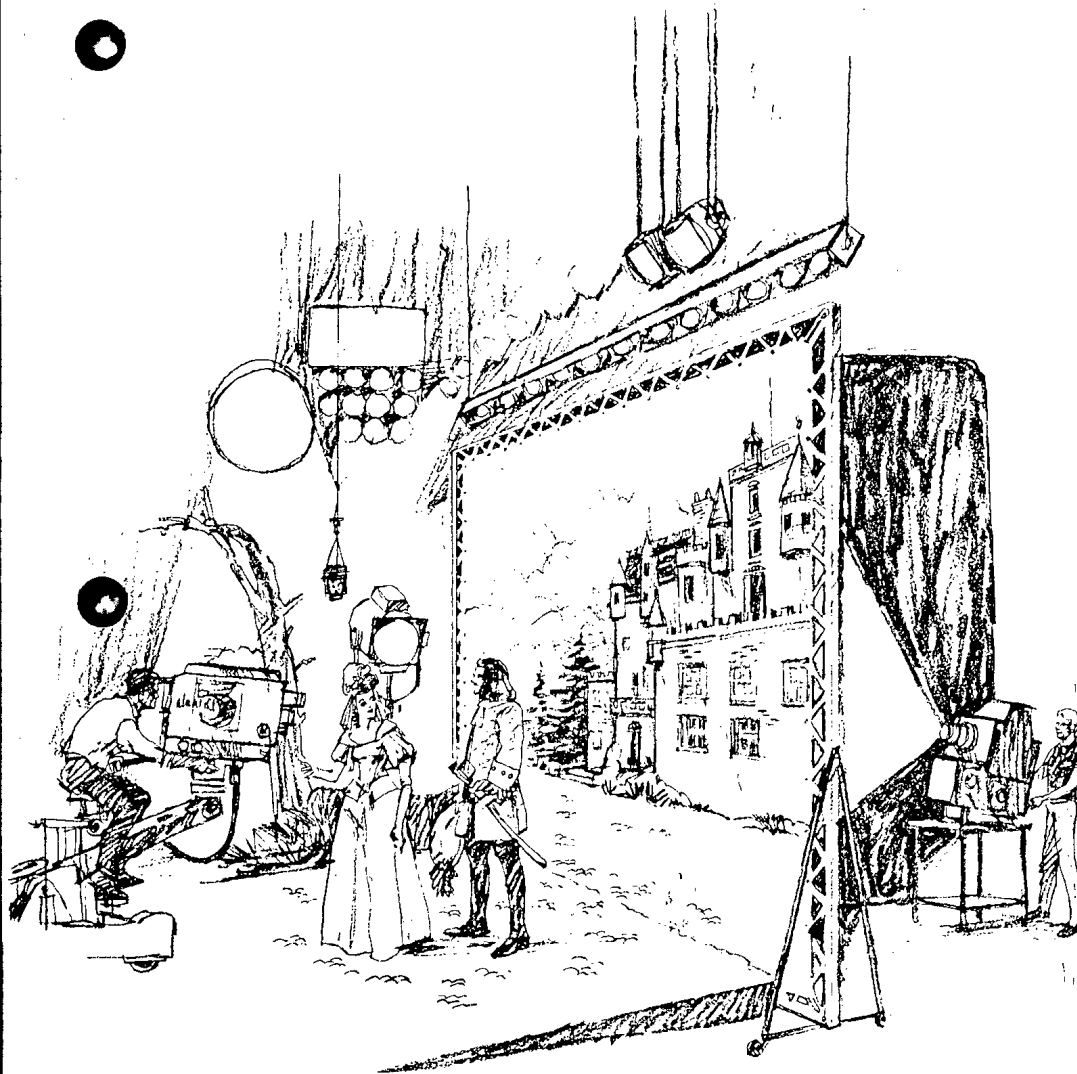
PRICE LIST:

Uni-Screen 550

Available in a wide range of sizes, the 550 rear projection screen comes complete with grommeted edges, lacing and installation instructions.

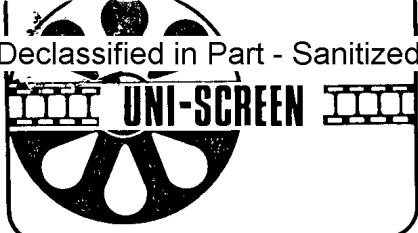
Price List: Uni-Screen 550

SIZE	WEIGHT	PRICE
3'x4'	3#	\$ 36.00
4'x5'	5#	\$ 60.00
4'x6'	5#	\$ 72.00
4'x8'	6#	\$ 96.00
5'x7'	6#	\$105.00
5'x8'	7#	\$120.00
5'x10'	8#	\$150.00
6'x8'	8#	\$144.00
6'x10'	9#	\$180.00
6'x12'	10#	\$216.00
6'x16'	20#	\$288.00
10'x10'	21#	\$300.00
9'x12'	21#	\$324.00
12'x12'	27#	\$432.00
12'x16'	43#	\$576.00
8'x15'	22#	\$360.00
8'x20'	35#	\$480.00
16'x16'	55#	\$768.00
10'x20'	45#	\$600.00
15'x20'	70#	\$900.00
20'x20'	90#	\$1200.00
10'x24'	50#	\$720.00
12'x24'	65#	\$864.00
24'x24'	130#	\$1728.00
12'x30'	80#	\$1080.00
15'x30'	105#	\$1350.00
20'x40'	190#	\$2400.00



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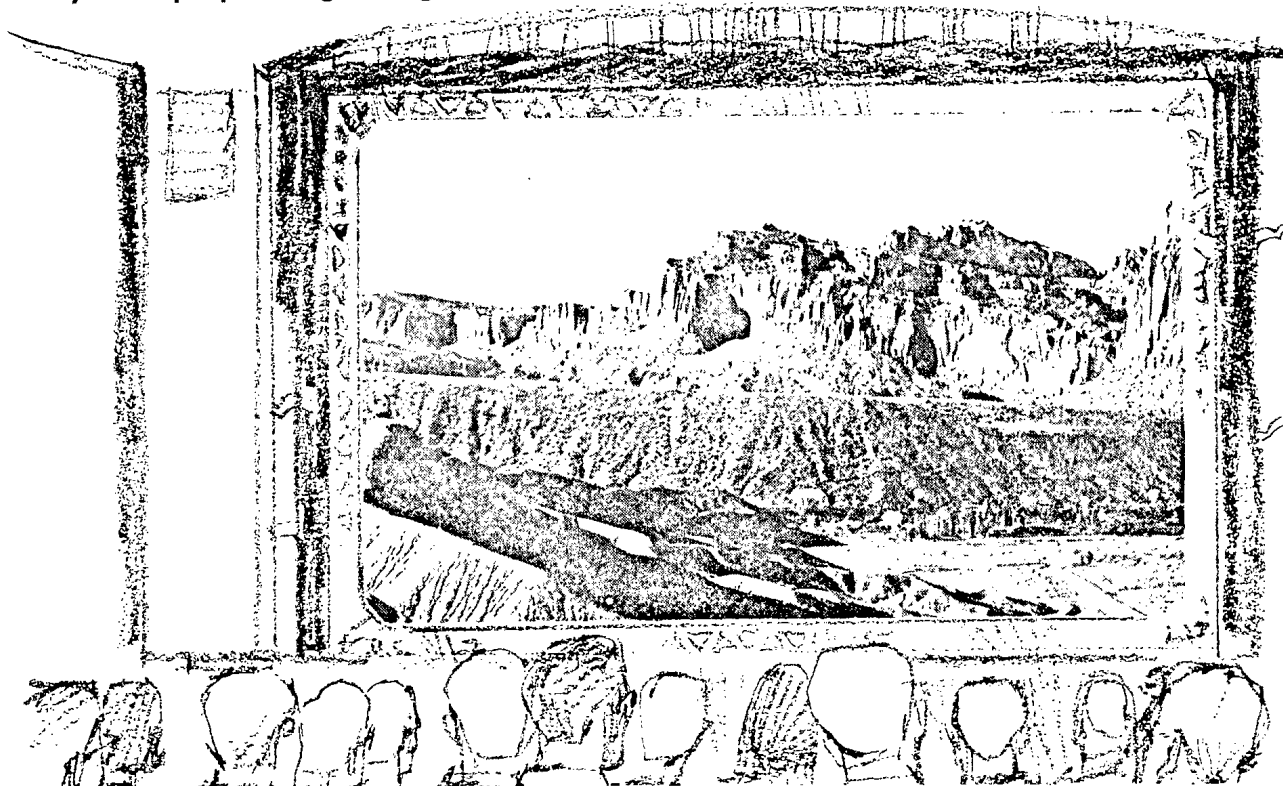
ROPE & PULLEY
SUPER REFLECTIVE

SCREEN

Series 250 Uni-Screen

TAKE NOTES SEE THE PROJECTED IMAGE!

Want your viewers to see the projected image and yet be able to take notes? Now the Uni-Screen 250 allows you to project large images while maintaining reasonable room lighting.



IDEAL FOR YOUR AUDITORIUM OR LECTURE HALL

Utilizing a simple rope and pulley device, this screen is especially designed for the lecture hall, training room and other larger areas where normal room light must be maintained.

Available in a full range of sizes up to large theater size. Comes complete with installation instructions and all mounting hardware. Specify wall or ceiling installation when ordering this model.

PRICE LIST UNI-SCREEN 250

SIZE	WEIGHT	PRICE	SIZE	WEIGHT	PRICE
8'x10'	95#	\$168.00	10'x20'	172#	\$294.00
10'x10'	97#	\$178.50	15'x20'	175#	\$357.00
9'x12'	100#	\$189.00	20'x20'	200#	\$425.00
12'x12'	105#	\$210.00	10'x24'	175#	\$325.00
10 1/2'x14'	120#	\$220.00	12'x24'	185#	\$357.00
14'x14'	125#	\$273.00	18'x24'	200#	\$425.00
6'x16'	140#	\$215.00	24'x24'	210#	\$504.00
12'x16'	147#	\$278.00	11'x28'	270#	\$415.00
16'x16'	150#	\$294.00	14'x28'	280#	\$455.00
9'x18'	155#	\$257.00	12'x30'	28' -	\$462.00
13 1/2'x18'	160#	\$310.00	15'x30'	290#	\$545.00
18'x18'	165#	\$340.00	22 1/2'x30'	300#	\$625.00
8'x20'	165#	\$263.00	30'x30'	310#	\$760.00

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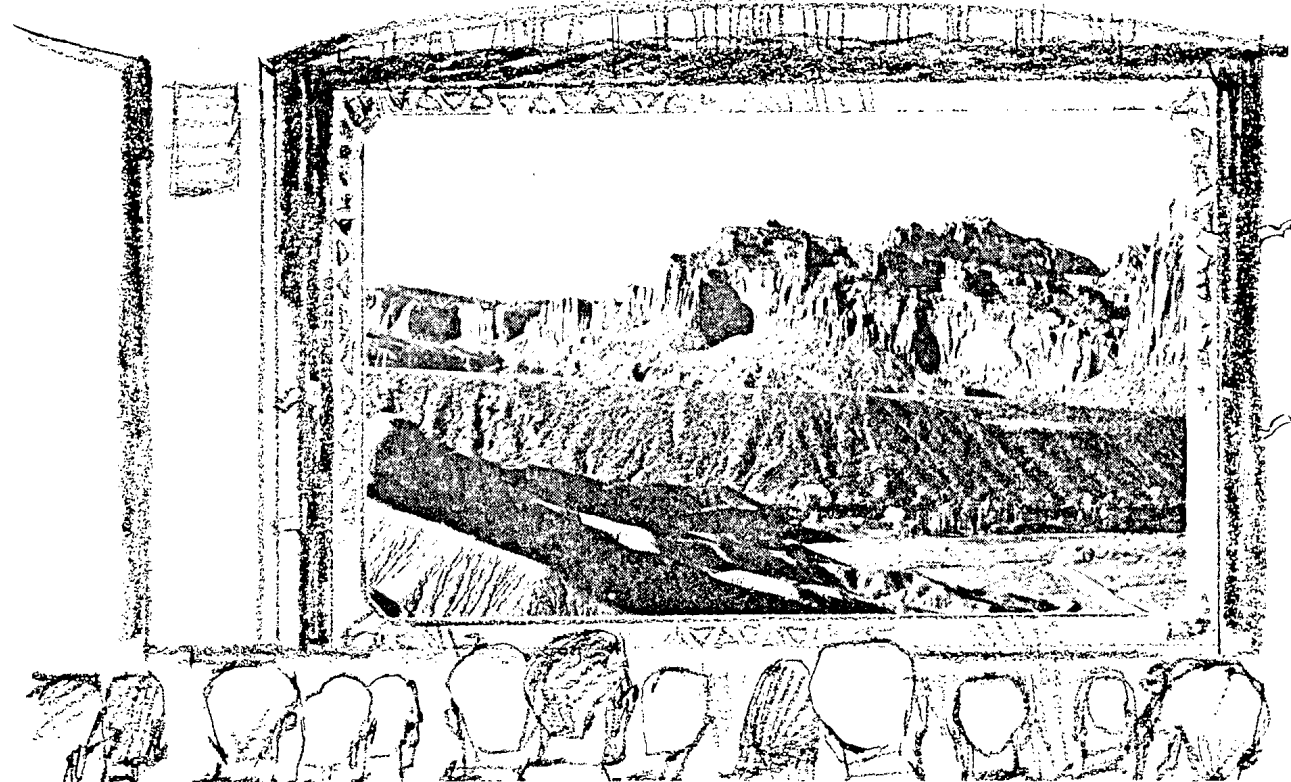
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